Dunkírk DWB Series

DWB Series Gas–Fired, Wall Hung Modulating Hot Water Boiler

(Available in both Combi & Space Heating–Only Models)

- 85% AFUE efficiency
- Inducer fan and gas valve modulate for operation between 33% and 100% of capacity for fuel economy.
- Chimney or Horizontal Vent
- Advanced Controls Digital Display with temperature indication, diagnostics and status symbols showing: Heating mode, Burner On and Burner Modulation Level
- Durable Lightweight One Piece Steel Jacket
- 10-Year Limited Copper Heat Exchanger Warranty
- 2–Year Limited Parts Warranty

Combination (Combi) – Heating and Domestic Hot Water (Model CCB–150)

- Available in 150 MBH
- Advanced Controls additional DHW mode
- Stainless Steel Brazed Plate Heat Exchanger for potable domestic hot water

Space Heating–Only (Models CHB–130 & CHB–100)

• Available in 2 sizes: 100 and 130 MBH



Innovative. Efficient. Dependable. Dunkirk?

Dunkírk DWB Series

Innovative.

Modern doesn't mean complicated...

Some of the best ideas actually are pretty simple, like the new Dunkirk DWB.The DWB Series is a "best of both worlds" alternative to large conventional cast iron boilers and more expensive wall hung condensing boilers. DWB saves on living space, is light weight and wall hung.

The Dunkirk DWB Series is ideal for both heating only and "combi" or combination heating and domestic hot water applications including:

- Single Family Homes
- Apartments/Multi-Family Dwellings with Individual Appliances
- Retro-fits for High Temperature Systems



The DWB's special copper heat exchanger design with a protective high temperature coating ensures years of reliable operation. The DWB is much smaller and lighter yet transfers heat seven times faster than cast iron.

Copper makes the DWB a compact, lightweight wall hung unit that saves valuable space and protects the boiler from basement flooding by getting it up off the floor.

Efficient.

Modulation –

The DWB's advanced control system gives you what you want when you need it. Your heating systems' boiler is sized to keep you warm during the coldest days of the year. But in the shoulder months all that fuel is not required to keep you warm and comfortable. The DWB's advanced modulating control system measures how much fuel is required based on load conditions (how cold it is outside) and delivers only what is needed. This is modulation and it burns less fuel, saves you money and is good for the environment.

The DWB boiler is 85% efficient, however the actual efficiency of a boiler is dependent upon the heating system it is matched with. If your home

was designed to minimize the amount of heat emitters (baseboard, radiators etc.) then it was likely designed to run at high temperature water supply which is ideal for a non-condensing boiler.

Conversely, if your home was designed for maximum heat emitters then it was designed to operate at low temperature water supply and should be matched with a condensing boiler like the Dunkirk Helix VLT 95% model to maximize efficiency. Make sure to consult with your professional contractor to match the right boiler to your heating system to maximize efficiency and make the best choice for your home.

Dependable.

The DWB Series features proven copper heat exchanger technology that has been in use for decades and reliable direct spark ignition. Dunkirk's quality construction is backed by a full 10 year limited copper heat exchanger warranty and a 2 year limited parts warranty.

DWB Combi Unit (CCB-150)





FRONT OF BOILER

Cold Climate Operation Condensate collector keeps condensation from impacting the pressure switch operation.

Modulating Fan With Air **Pressure Sensor** Automatically adjusts the fan speed according to the flue draft.

Copper Heat Exchanger Features high temperature corrosion resistant protective film.

Stainless Steel Burners

Modulating Gas Valve

3-Speed Pump with Anti-Seize Every 24 hours, pump will run for 5 seconds.

CONTROL DISPLAY

LCD Display

- Eco/Comfort DWH Request
- Burner On •CH Request Burner Power
- Operating Temp.

Reset

Central Heating Settings

Water Pressure and **Temperature Gauge**

Domestic Hot Water Settings

ON/OFF and Comfort Mode Key

TOP OF BOILER

Air Intake 2 Alternate Locations

Boiler Venting Options Flue Exhaust Category I - Chimney Venting Category III - Sidewall





BACK OF BOILER

Integrated in the pump block.

24-Volt Diverting Valve-**Priority for Domestic** Hot Water

DHW Stainless Steel Brazed Plate Heat Exchanger



BOTTOM OF BOILER



The DWB is a practical, affordable, modern approach to residential heat and domestic hot water.

Dunkirk DWB Series Gas-Fired Hot Water Boiler

Dimensional Diagram		Model Input		Rate	Heating Capacity	Net / Rat	AHRI ting,	Vent Diameter		AFUE %	
			(MB	H) ⁽¹⁾	(MBH) ⁽¹⁾	Wa (MB	ater 5H) ⁽²⁾	To Chimney ⁽³⁾ (Category I)	Horizontal Vent* (Category III)		
		CCB-150	150		127	1	10	4"	3"	85	
	DWB Combi Unit (CCB-150) Shown	CHB-130	10	30	110	g	96	4"	3"	85	
		CHB-100	1(00	85	7	'3	4"	3"	85	
		* Horizontal Venting requires field supplied appliance adapter for the boiler flue outlet.									
5	See IOM for dimensions on other models.	(1) Input rating for sea level to 2,000 ft. (610m) above sea level. United States, over 2000 ft (610m) above sea level. Reduce input rate 4% for every 1000 ft (304m) above sea level.									
	ТОР	(2) Net AHRI Water Ratings shown based on piping and pickup allowance of 1.15. Consult manuf selecting boiler for installations having unusual piping and pickup requirements, such as intermitted operation, extensive piping systems, etc.								cturer before nt system	
	Width 17-23/32"	(3) Boiler is provided with a 3" vent connection. A 3" x 4" increaser must be field supplied for chimney vent applications. This does not infer that the connection to the chimney will always be 4". Please refer to IOM, National Fuel Gas Code, ANSI Z223.1/NFPA54, or applicable provisions of the local building codes for details concerning proper chimney connections.									
		General Information (See Installation, Operation and Maintenance Manual for complete instructions)									
		Clearances		Тор			Combustible Materials (Required) ⁽⁴⁾		Servic	Service ^{(4) (5)}	
							16" (41 cm)		12" (3	12" (30 cm)	
	FRONT	(4) Required distances measured from boiler.		Left Side			0" (0 cm)		1" (3	1" (3 cm)	
				Right Side			0" (0 cm)		1" (3	1" (3 cm)	
		(5) Service, proper operation clearance recommendation.		Front			0" (0 cm)		1" (3	1" (3 cm)	
L T				Back			0" (0 cm)		0" (0	0" (0 cm)	
				Bottom			0" (0 cm)		4" (12	4" (12 cm)	
				Combustion Air/ Vent Piping			2" (5 cm)		3/8" (3/8" (1 cm)	
7-9/16"		Connections CCB-150		Return/Supply Water 1", Gas In 3/4" NPT, Domestic Hot Water Inlet/Outlet 3/4 " NPT							
Height 2		Connection CHB-130 &	ns CHB-100	Return/Supply Water 1", Gas In 3/4" NPT							
		Electrical		120 Volts AC, 60 hertz, 1 phase, Less than 12 amps (15 amp circuit recommended)							
		Water Cont	tent	CCB-150396 Gallons, CH			B-130 ·	317 Gallons, CHE	3-100211 Gallon	0211 Gallons	
		Dimensions/ Weights		Moo	lel	"Width"		"Height	t" "Depth"	"Weight"	
1				CCB-	150	17-23/32"		27-9/16	<u> </u>	78	
				CHB-	130	15-3/4"		27-9/16	<u> </u>	69	
				CHB-	100	ID-3/4		27-9/16	5″ 13″	65	
		Standard E	quipment	 Boiler Control Module: High Limit/Electronic Ignition Control. User Display Interface: Digital Temperature Display with diagnostics and programmable settings. Heat Exchanger: Copper Fin Tube. (CCB-150 combination boiler includes a stainless steel brazed plate heat exchanger - 3.5 to 4 gpm.) Valve: 3-Way Water Diverting Valve. Combustion: Completely Installed and Wired Modulating Gas Control System (100% to 33%) with Stainless Steel Burners and Manifold consisting of: Automatic Modulating Gas Valve, Direct Spark Ignition Control, 100% Shut Off, Combination Spark Electrode/Flame Sensor. Safety: Pressure Switch (vent safety shutoff). Other: Assembled Boiler with Jacket, Induced Draft Fan, Combination Temperature/ Pressure Gauge, Circulator Pump. Field installed - 30lb. ASME Relief Valve. 							
		Options		LP Gas Conversion Kit, Horizontal Vent Termination Concentric Kit, Indirect Hot Water Tank Sensor, Outdoor Air Temperature Reset Sensor.							
		Certificatio	ns	C.S.A Natural G	Estient Entified for tas or Propane		® Tester W	ASME H d for 43.5 psi. ASME porking Pressure		IED®	
L											

All ratings and specifications subject to change.



P.O. Box 4729 Utica, New York 13504 Tel: 315.797.1310 Fax: 315.797.3762 Contractor Assistance: 800.325.5479

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www.dunkirk.com